

XI.—*A List of the Birds collected in Northern Saskatchewan and Northern Manitoba by Captain Buchanan in 1914.* By J. H. FLEMING, C.M.Z.S., C.M.B.O.U.

ALMOST the first knowledge we have of the ornithology of the Saskatchewan region is that contained in a series of papers published in 'The Ibis' of 1861-62-63 by Captain Blakiston, who spent the winter of 1857-58 at Port Carlton on the Saskatchewan River, and in 1858 collected at various points in what is now the Province of Saskatchewan. In these papers he incorporated information contained in vol. ii. of the 'Fauna Boreali-Americana' of Richardson and Swainson, and other published sources of information. Since then our knowledge of the birds of southern Saskatchewan has been considerably enlarged, but strangely enough the ornithology of the great region drained by the Churchill River and lying to the north of what was till 1912 the northern boundary of the province has had little or no attention paid to it. Notes on the birds were made by James M. Macoun, who in 1888 travelled east from Lesser Slave Lake by way of the Athabasca and Churchill Rivers to Lake Winnipeg, and these were eventually published by John Macoun in his 'Catalogue of Canadian Birds.' Less than a dozen specimens are in the U.S. National Museum, collected at Du Brochet Lake in 1890 and Pelican Narrows on the Churchill River in 1891, probably by Henry MacKay and Joseph Hourston, for Roderick MacFarlane; these are the only skins I have seen from the region taken previous to 1914. During the years 1892-93-94, J. Burr Tyrrell in the course of his explorations of the Barren Grounds more than once traversed the Churchill River, and his official reports* contain the best description we have of this region; in these there are short references to birds. When Edward A. Preble wrote

* Annual Report Geological Survey of Canada, viii. (new series), Part D, pp. 50-120 D, Ottawa, 1896; *ibid.* ix. 1896, Part F (1897).

his great report on the natural history of the Athabasca-Mackenzie Region* he included all that was known of the ornithology of the Churchill River up to 1908.

When the boundaries of Saskatchewan were in 1912 extended north to include a part of the old North-West Territory, so little was known at Regina of the natural history of the northern part of the country that Angus Buchanan determined to investigate the district lying between the Saskatchewan River and the Barren Grounds. He left Prince Albert on 6 May, 1914, descended the Beaver River, reached Lake Île-à-la-Crosse on the 22nd, the Churchill River on 1 June, the Reindeer River on the 28th, Reindeer Lake on 9 July, arriving at Port Du Brochet in the newly extended Province of Manitoba on the 17th; he entered the Cochrane River on the 18th and Lake Du Brochet on 1 August; his base camp was made north of this lake, where he proposed to winter, but hearing of the outbreak of the war he decided to return to Regina, reaching that place on 15 January, 1915, after an absence of eight-and-a-half months, during which he travelled nearly 3000 miles by canoe and dog-sleigh. The specimens collected during this trip were divided, part being deposited in the Museum at Regina, and part being handed over to me; they form a very important addition to our knowledge of the birds of the region drained by the Churchill River, and constitute in fact the first collection made in northern Saskatchewan. After making a short report † of his trip to the Provincial Museum at Regina, Mr. Buchanan returned to his home in Scotland, enlisted in the Legion of Frontiersmen (25th Royal Fusiliers) as a private, was sent to East Africa and served throughout the campaign. He rose to the rank of Captain, received the Military Cross, and on being invalided home requested me to prepare a list of the

* A Biological Investigation of the Athabasca-Mackenzie Region. North American Fauna, No. 27. Bureau of Biological Survey, Washington, 1908.

† Report of the Chief Game Guardian, 1914, pp. 33-34, 37-39; Regina, 1915.

birds collected in 1914. I had already examined those at Regina in 1915, and I am indebted to Mr. H. H. Mitchell of the Provincial Museum there for the loan of those that were needed for comparison. The data on the specimens themselves are exceedingly full, and Captain Buchanan has furnished me with a list of them, together with notes on the colours of the soft parts, food, etc.; from this I have quoted when necessary. The nomenclature used is that of the A. O. U. Check-List of 1910.

Colymbus holbælli. Holbæll's Grebe.

Set of five eggs taken on Churchill River, 6 June; bird seen at close range.

Gavia immer. Loon, Great Northern Diver.

An adult taken on Reindeer Lake, 8 July.

Larus brachyrhynchus. Short-billed Gull.

An adult female taken on Reindeer Lake, 9 July, one more seen on same date; this is very far east for the Gull. "Iris clear blackish grey; edge of eyelid surrounding eye deep orange-chrome; corners of mouth pure orange-chrome; bill evenly coloured dead yellow; feet pale whitish yellow."

Dr. Oberholser regards this Gull as a subspecies of *Larus canus* *.

Larus delawarensis. Ring-billed Gull.

A male taken on Île-à-la-Crosse Lake, 23 May; adult, except for the black primaries and terminal black band of the tail; probably a non-breeding bird. "Bill medium dark greenish-yellow, with strong black ring around bill a short distance from tip; eyelids and corners of mouth deep orange-chrome; feet pale greenish-yellow." Seventeen others seen with this bird.

Larus philadelphia. Bonaparte's Gull.

Four specimens: an adult male (thought by the collector to be a non-breeding bird) taken on the Cochrane River,

* 'Auk,' xxxvi. 1919, pp. 83-84.

20 July. "Iris dark ; bill black ; legs and feet orange-chrome." An adult female, taken on Cochrane River, 25 July. "Iris dark ; eye-ring dark crimson ; bill black ; corners of mouth reddish flesh-colour ; legs whitish orange-chrome ; feet more rich chrome." Two juvenile birds taken on Lake Du Brochet, Cochrane River, 1 August ; one of these, a female, is marked "Iris dark ; bill medium dull blackish-grey ; both mandibles dark from nostril out ; legs, feet, and webs whitish skin-colour with pale brown joints." This species is believed to breed in trees here, and it is unfortunate, in view of the young birds taken, that the nesting-site was not found.

Xema sabini. Sabine's Gull.

Three seen and a pair of adults taken on Sandy Lake, Churchill River, 9 June ; the female is marked "Iris black ; pure red eye-ring ; bill black to one-eighth beyond nostril, remainder of tip medium dull lemon-yellow ; feet black."

Sterna hirundo. Common Tern.

A juvenile female, with pinions not fully grown, taken on Cochrane River, 14 August. Seen in company with parents and another young bird.

Mergus americanus. Merganser.

A male in very worn immature plumage taken on the Churchill River, 1 June. "Iris dark ; bill medium deep crimson, crown of upper mandible black ; feet bright orange-chrome."

Mergus serrator. Red-breasted Merganser.

An adult female taken on Lake Île-à-la-Crosse, 23 May. "Iris clear deep umber-brown ; bill all red except along crown of upper mandible, which is dark horn-brown ; legs and feet rich reddish orange-chrome."

A young female in down, length 14.75 in., taken on the Cochrane River, 15 August. "Iris pale clear brownish sage-green ; bill blackish brown over crown of upper mandible for entire length except tip, sides of upper mandible and entire lower mandible pale dull buffish yellow ; legs and

feet dull brownish grey; neck dull umber-brown. Bird in company with mother and about a dozen young."

Set of twelve eggs taken on rocky island in Reindeer Lake, 12 July. "Nest found on ground concealed beneath ledge of rock, eggs almost on rock, and rim of nest composed of small leaves and twigs profusely mixed with blackish-grey down."

Nettion carolinense. Green-winged Teal.

A pair taken on the Beaver River, 18 May.

Oidemia perspicillata. Surf Scoter.

Three specimens: one adult male taken at Lake Île-à-la-Crosse, 31 May; two adult females taken on the Reindeer River, 30 June. "Flock of about twelve Scoters together, all in pairs."

Phalaropus fulicarius. Red Phalarope.

A male taken on Sand-Fly Lake, Churchill River, 11 June.

Steganopus tricolor. Wilson's Phalarope.

Two specimens: an adult female taken on Crooked Lake, 13 May. "Bird alone, resting as if tired out, perhaps migrating." The other an adult male taken on the Beaver River, 19 May. "Male and female together on floating weeds on edge of small lake off Beaver River; birds in company with a pair of Dowitchers and a Lesser Yellow-leg."

Gallinago delicata. Wilson's Snipe.

Nest taken near Lake Île-à-la-Crosse, 31 May. "Four eggs, slightly incubated, nest of damp grasses among low snowberry bushes. Flushed bird off nest three or four times to-day and yesterday."

Macrorhamphus griseus griseus. Dowitcher.

Five specimens: a pair taken on Crooked Lake, 13 May, have been compared with a series of this form and of *M. g. scolopaceus*. Another pair taken on the Beaver River 19 May, and a male on Lake Île-à-la-Crosse on 23 May.

Pisobia fuscicollis. White-rumped Sandpiper.

A female taken on Sandy Lake, Churchill River, 10 June, and a male taken, Sand-Fly Lake, Churchill River, 11 June.

Pisobia bairdi. Baird's Sandpiper.

Four specimens: a female taken near Fort Du Brochet, Reindeer Lake, on 17 July, and a male and two females taken on the Cochrane River, 23 July.

Pisobia minutilla. Least Sandpiper.

Four specimens: a female, Reindeer Lake, 13 July. "Bird alone on island, apparently had nest." A female taken 29 July, and a pair taken 30 July on the Cochrane River.

Pelidna alpina sakhalina. Red-backed Sandpiper.

A female, Churchill River, 8 June. "Shot on small stony island, in company with seven Semipalmated Sandpipers."

Ereunetes pusillus. Semipalmated Sandpiper.

Two pairs obtained on the Churchill River, 2 June, from a flock.

Calidris leucophæa. Sanderling.

Three specimens procured from a flock of four, Cochrane River, 21 July, "probably non-breeding birds."

Helodromus solitarius solitarius. Solitary Sandpiper.

"A female with large egg in oviduct," Beaver River, 18 May.

Actitis macularia. Spotted Sandpiper.

Two adults: a male, Crooked River, 15 May, and a female, Lake Île-à-la-Crosse, 23 May. Two sets of four eggs each, taken on the Churchill River, 10 and 13 June, also a downy young bird taken on the Cochrane River, 29 July.

Charadrius dominicus dominicus. American Golden Plover.

An adult female, taken when in company with Killdeer Plover on the Churchill River, 2 June. "Eye, bill, and feet black."

Oxyechus vociferus. Kildeer.

Seen in company with the Golden Plover, but no specimens taken.

Ægialitis semipalmata. Semipalmated Plover.

Four specimens: a male, Île-à-la-Crosse, 23 May; a pair, Cochrane River, 23 July, and a female taken 29 July, also on the Cochrane River.

Arenaria interpres morinella. Ruddy Turnstone.

Four specimens: a female found alone on Lake Île-à-la-Crosse on 22 May; a male also found alone on the same lake on the 23rd; and two females obtained from a large flock on 9 June on the Churchill River.

Canachites canadensis canadensis. Hudsonian Spruce Partridge.

Eight specimens, six adults and two downy young. A pair with nest and eggs taken at Lake Île-à-la-Crosse, 25 May; male not preserved. "Eggs six in number, fresh; nest on ground close at foot of alder bush; site dry open poplar knoll, surrounded by dense spruce and tamarack swamp; nest of dry leaves, same as carpet of surrounding ground, a few feathers lining nest." A male, same locality, 29 May. A female in moult and a downy young, Reindeer Lake, 10 July; the female has pin-feathers on the sides of the head, and new tail-feathers are appearing. A downy young bird, Cochrane River, 20 July, was with other young and female parent when taken. A male taken, 3 August, a female, 4 August, and a male, 7 August; all adults, Lake Du Brochet. The young could fly, though the first-named was only five inches in length.

Lagopus lagopus lagopus. Willow Ptarmigan.

One specimen, Fort Du Brochet, Reindeer Lake, 4 November. "Same day first Barren Land Caribou of the season were shot."

Accipiter velox. Sharp-skinned Hawk.

An adult male, Otter Lake, Churchill River, 20 June.

Astur atricapillus atricapillus. American Goshawk.

A female and set of three eggs, Beaver River, 16 May.

Buteo platypterus. Broad-winged Hawk.

Three specimens: a melanotic male, Crooked River, 14 May, is chocolate-brown except for the tail-bars, which were normal; a male was taken in the same locality on the 15th, and a female taken on Beaver River, 16 May.

Haliaëtus leucocephalus alascanus. Northern Bald Eagle.

An adult and three downy young, the first a male taken on the Churchill River, 12 June; the downy young taken on Reindeer Lake, two on the 7th and one on the 10th of July; these are marked "Iris dark umber-brown; bill dark horn-colour, cere slightly lighter brown; corner of mouth pale whitish-yellow; legs and feet pale whitish-yellow."

Falco columbarius columbarius. Pigeon Hawk.

Seven specimens. An adult female (two other birds seen), Reindeer Lake, 13 July. A female in company with four or five almost fully-fledged young, three of which were taken, Lake Du Brochet, 3 August; the young have the wings and tail not fully grown, and traces of down on the head; the old bird is in very worn plumage with one fresh blue tail-feather, but showing no other sign of the blue plumage. Two fully-fledged young birds; two others seen, Lake Du Brochet, 7 August.

Pandion haliaëtus carolinensis. American Osprey.

Three specimens. A female, Crooked Lake, 13 May. A male taken with nest, Lake Île-à-la-Crosse, 25 May: "Nest containing single egg on very top of broken-off dead Jack pine; nest mainly built of dry twigs, inside thickly lined with damp mud, grass and moss; fish-scales on edge of nest: the male bird was bringing both talons full of damp moss to nest when shot." A female taken with nest and two eggs, Churchill River, 6 June.

Surnia ulula caparoch. American Hawk Owl.

A male taken on Lake Du Brochet, 1 August.

Picoides arcticus. Arctic Three-toed Woodpecker.

An adult male, Cochrane River, 31 July; yellow crest much worn, exposing the white bases of the feathers.

Picoides americanus fasciatus. Alaskan Three-toed Woodpecker.

An adult female, Fort Du Brochet, 22 October.

Sphyrapicus varius varius. Yellow-bellied Sapsucker.

Two males, Big River, 7 and 11 May.

Colaptes auratus borealis. Boreal Flicker.

One female, Cochrane River, 31 July, the male seen. There is another adult female in the U.S. National Museum taken at Lake Du Brochet 26 September, 1890. This form is included in the range of *luteus* in the A. O. U. Check-List.

Sayornis phœbe. Phœbe.

A male, Reindeer River, 30 June.

Nuttallornis borealis. Olive-sided Flycatcher.

Two males, Lake Île-à-la-Crosse, 27 and 28 May.

Empidonax trailli alnorum. Alder Flycatcher.

Three specimens: a male, Churchill River, 6 June; two from the Cochrane River, 27 and 28 July, the latter a female; all taken in willows at edge of marsh.

Empidonax minimus. Least Flycatcher.

A female, Lake Île-à-la-Crosse, 29 May, and a male, Reindeer River, 28 June.

Perisoreus canadensis canadensis. Canada Jay.

An immature bird, Reindeer Lake, 11 July, is somewhat difficult to place; it compares well with one of about the same age from 40 miles S.W. of Calgary, Alberta, 4 August, 1895, and is not so dark above as a younger specimen from Latchford, Ontario, 10 June, 1906. Preble refers to a breeding bird from Pelican Narrows, Churchill River, in the

U.S. National Museum *, and in fact Reindeer Lake is well within the known range of *canadensis*.

Corvus corax principalis. Northern Raven.

Five specimens : three from Churchill River, a young bird taken from the nest, 2 June, an adult female, 18 June, and a young bird fledged and in company with parent and two other young ; two adult males taken 15 December, one on Lake Du Brochet, the other on Reindeer Lake.

Corvus brachyrhynchos brachyrhynchos. American Crow.

An immature female taken on the Reindeer River, 29 June ; this bird compares with a breeding female from Craven, Saskatchewan, much better than it does with Ontario birds, and may perhaps be placed with the Western Crow, *C. b. hesperis* ; but owing to lack of material of comparable age I hesitate to do so.

Euphagus carolinus. Rusty Blackbird.

Three specimens from Lake Du Brochet, 7 August : an adult male, "iris clear yellowish white" ; an immature (female ?), "iris medium clear umber-brown" ; and an immature male, "iris pale sage-green."

Carpodacus purpureus purpureus. Purple Finch.

Two adult males, Big River, 9 May ; a female seen with them.

Acanthis linaria linaria. Redpoll.

Three specimens : an adult male with rosy breast, Cochrane River, 21 July, "bird in company with one young, bill dark brownish" ; two males, an adult and young bird, Lake Du Brochet, 10 August, "bill flat black" in the young.

Plectrophenax nivalis nivalis. Snow Bunting.

One specimen, Reindeer Lake, 23 October. "Large flocks of these birds for the past fortnight."

* North American Fauna, No. 27, 1908, p. 402.

Passerculus sandwichensis alaudinus. Western Savannah Sparrow.

Three specimens : one from Lake Île-à-la-Crosse, 27 May, an adult male from Fort Du Brochet, 17 July, and a juvenile female, Cochrane River, 28 July. These are very dark birds, much more so than *alaudinus* should be, and very different from the light race that breeds in southern Saskatchewan, which is no doubt *nevadensis*.

Passerherbulus lecontei. Leconte's Sparrow.

Two specimens : one of a pair, Churchill River, 2 June ; a male, Haultain River, 6 June : "birds breeding here."

Zonotrichia querula. Harris's Sparrow.

Seven specimens : an adult female and a juvenile male, Cochrane River, 26 July ; an adult male, Cochrane River, 30 July, "male and female with fledged young" ; a female and young bird, Cochrane River, 31 July ; a female, Cochrane River, 3 August, "bird in company with others, probably her fully-fledged young" ; an adult female, Lake Du Brochet, 6 August. Adults' "bill dull sienna-brown" ; juveniles' "bill blackish brown, yellow along edges of mandibles and at corners of mouth." So little is known of the early plumage of this Sparrow that a description of the young of 31 July may not be out of place : Length 3.75 in. ; pileum with feathers brownish black indistinctly edged with greyish buff, producing a dark crown with a few greyish-buff spots ; throat and chin greyish buff, throat with a few blackish-brown spots ; chest brownish buff streaked with brownish black ; flanks buff with brown streaks ; rest of under parts buffy white. Above brown streaked with black ; upper tail-coverts brownish buff, tail darker than in adult ; wing-coverts tipped with buff.

Zonotrichia leucophrys gambeli. Gambel's Sparrow.

Three specimens : an adult male and a juvenile male, Reindeer Lake, 16 July ; and a young male, Cochrane River, 26 July.

Spizella monticola monticola. Tree-Sparrow.

A male, Reindeer Lake, 11 July, "two pairs breeding on an island; first of this species seen on this expedition." A female, Fort Du Brochet, 17 July, "bird had young almost fully fledged."

Spizella passerina passerina. Chipping Sparrow.

A male, Lake Île-à-la-Crosse, 27 May.

Melospiza melodia melodia. Song-Sparrow.

A pair, Reindeer River, 28 June.

Melospiza lincolni lincolni. Lincoln's Sparrow.

A male, Reindeer River, 29 June.

Melospiza georgiana. Swamp-Sparrow.

A male, Churchill River, 6 June. "Small colony of the birds breeding in this place."

Passerella iliaca iliaca. Fox Sparrow.

Four specimens, all males: one Reindeer Lake, 11 July; three Cochrane River, 18 and 24 July and 3 August; the July bird was carrying food to its fledged young.

Petrochelidon lunifrons lunifrons. Cliff-Swallow.

Two females, Churchill River, 9 June; a pair, Cochrane River, 6 August; fully fledged young in company with these last.

Iridoprocne bicolor. Tree-Swallow.

Two specimens: a female, Crooked River, 15 May; a young male, Du Brochet Lake, 6 August. Two sets of eggs taken on the Churchill River, 11 June; nests in old woodpeckers' holes in dead poplars.

Riparia riparia. Bank-Swallow.

A male, Sandy Lake, Churchill River, 9 June.

Bombycilla garrula. Bohemian Waxwing.

Two specimens from Cochrane River: a juvenile male taken 28 July—"iris dark, not reddish brown like adult"; an adult female, 30 July.

Bombycilla cedrorum. Cedar Waxwing.

A male, Key Lake, 25 June.

Lanius borealis. Northern Shrike.

A male, Cochrane River, 19 October.

Vireosylva olivacea. Red-eyed Vireo.

A male, Dead Lake, Churchill River, 17 June.

Lanivireo solitarius solitarius. Blue-headed Vireo.

A male, Lake Île-à-la-Crosse, 28 May.

Mniotilta varia. Black-and-White Warbler.

A male, Beaver River, 17 May.

Vermivora peregrina. Tennessee Warbler.

Three males, two from Lake Île-à-la-Crosse, 27 May and 2 June, one from Dead Lake, Churchill River, 17 June.

Dendroica æstiva æstiva. Yellow Warbler.

Two males, one from Lake Île-à-la-Crosse, 27 May, the other from Reindeer Lake, 4 July; the latter is only a little more worn than the May bird.

Dendroica coronata. Myrtle Warbler.

Three specimens: two adult males from Big River, 7 and 8 May; a juvenile, Cochrane River, 27 July. Hoover's Warbler, *D. c. hooveri*, has recently been received by Dr. Oberholser, and the range of this western race of the Myrtle Warbler is given as reaching east to central Mackenzie; but the adult taken 8 May, which I have been able to compare with series of both the supposed races, is nearer to *coronata*.

Dendroica striata. Black-poll Warbler.

A male, Beaver River, 18 May.

Dendroica palmarum palmarum. Palm Warbler.

A male, Beaver River, 18 May.

Seiurus noveboracensis noveboracensis. Water-Thrush.

Three specimens: a female, Beaver River, 20 May, a male, Knee Lake, Churchill River, 6 June, and a female, Reindeer River, 28 June; these are close to Grinnell's Water-Thrush, *S. n. notabilis*, in colour.

Wilsonia pusilla pusilla. Wilson's Warbler.

A male, Lake Île-à-la-Crosse, 26 May.

Sitta canadensis. Red-breasted Nuthatch.

A male, Lake Île-à-la-Crosse, 25 May.

Penthestes hudsonicus hudsonicus. Hudsonian Chickadee.

Three specimens: a pair taken at Big River, 8 May, and a young bird, Cochrane River, 24 July; the last is interesting, for, though full-grown (length 5 in.), the pileum instead of being soft greyish brown is blackish brown, forming a distinct cap, while the hind neck and back are brownish grey.

Regulus calendula calendula. Ruby-crowned Kinglet.

Three specimens: a male, Lake Île-à-la-Crosse, 28 May, a female taken with nest containing young, Churchill River, 3 July, and a male taken at Reindeer Lake, 9 July. The nest here mentioned is described as follows:—"Nest in young spruce tree about ten feet high; placed against limb and about eight feet up. It contained seven young about fourteen days old."

Hylocichla aliciaë aliciaë. Grey-cheeked Thrush.

Two males: Big River, 11 May; Churchill River, 18 June; the latter is in very worn plumage, "bird in company with mate."

Hylocichla ustulata swainsoni. Olive-backed Thrush.

Two males: Île-à-la-Crosse, 25 May, and Black Bear Island, Churchill River, 14 June.

Hylocichla guttata pallasi. Hermit Thrush.

A male, Beaver River, 18 May.